

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id CAI320303

Component Compressor Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		DFP0000040		
Sample Date		Client Info		10 May 2024		
Machine Age	hrs	Client Info		18458		
Oil Age	hrs	Client Info		451		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>15	0		
Lead	ppm	ASTM D5185m	>65	0		
Copper	ppm	ASTM D5185m	>65	2		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		<1		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		<1		
Calcium	ppm	ASTM D5185m		0		
Phosphorus	ppm	ASTM D5185m		44		
Zinc	ppm	ASTM D5185m		60		
Sulfur	ppm	ASTM D5185m		154		
CONTAMINANTS	i -	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	<1		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.1	0.001		
ppm Water	ppm	ASTM D6304	>1000	8		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	5711		
Particles >6µm		ASTM D7647	>2500	717		
Particles >14µm		ASTM D7647	>320	28		
Particles >21µm		ASTM D7647	>80	8		
Particles >38µm		ASTM D7647	>20	1		
Particles >71µm		ASTM D7647	>4	0		
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/17/12		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.10		

Contact/Location: Service Manager - FIRHUM Page 1 of 2



١ 12000

10000

8000 Water (ppm)

6000

4000

2000

12k

21 0k

١ 12000

> 2000 0

52

50 48 ()- 46 ()- 46 ts

42

40. 38

12k

er of particles (1 ml) 9 98 101

4k 2k Ok

umber of particles (1 ml) o x0

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OIL ANALYSIS REPORT

-	Water (KF)		VISUAL		mothed	lippit//e.e.e.	<u></u>	المراجل .
10					method	limit/base		hist
0	Severe G			scalar	*Visual	NONE	NONE	
10				scalar	*Visual	NONE	NONE	
10	-		1	scalar	*Visual	NONE	NONE	
10		Si		scalar	*Visual	NONE	NONE	
10	Abnormal			scalar	*Visual	NONE	NONE	
0	24		and/Dirt	scalar	*Visual	NONE	NONE	
	May10/24 May10/24			scalar	*Visual	NORML	NORML	
	× ×			scalar	*Visual	NORML	NORML	
!k	Particle Trend			scalar scalar	*Visual *Visual	>0.1	NEG NEG	
lk	4μm 		FLUID PROPERTI		method	limit/base	current	hist
lk .	ιτμπ			cSt	ASTM D445		47.9	
ik ik		_	SAMPLE IMAGES		method	limit/base	current	hist
!k					motiloa	in in baoo		Thet
k	*	_						
	May10/24 May10/24	C	olor					no im
0	Water (KF)	D	ottom					
0	Severe	D	Suom					no im
0			GRAPHS					
10			Ferrous Alloys				Particle Count	
10	Abnormal	¹⁰ T				491,5		
0		8 -	iron chromium			122,8	80 Severe	
	May10/24	ud 4	nickel			20.7		
	Ma	2				30,7	Abnormal	
	Viscosity @ 40°C	0				7,6	BO	
2	Abnormal		May I U/ 24			May10/24 s (per 1 ml	20	•
8						May10/24 particles (per 1 ml) th		
6		10 -	Non-ferrous Metals			oitued 4	80	
4		8	copper			per of	20	
2		_ 6-	tin			number		\
0	- Abnormal D	udd 4					30 -	1
8	1/24	2 -					8-	
	May10/24	0				24	2-	
		-	May 1 U/ 2'			May10/24		
k	Particle Trend		≥ Viscosity @ 40°C			2		14μ
k	μοιοιπία: 4μm	55 T				_ 0.	Acid Number	
k	μ	5U +	Abnormal			KOH/g		
k		(J-045 -				E 0.	10 -	
-k		cSt (Abnormal			pel De De D	05	
!k		40 -				Acid Number (mg K0H/g) .0		
k		35 🕹					24	
	May10/24	-	May I U			May10/24	May10	
	Ma							
5			arCheck USA - 501					FIRS
j	Sample No.		P0000040 <mark>81323</mark>	Recei Teste		6 May 2024 7 May 2024		
	Vestion Laboration Unique Number			Diagr) May 2024 - An	gela Borella	0
Ì	Certificate 12367 Test Package To discuss this sample report		ANT (Additional Tes act Customer Servic			70.		Cor
Į	* - Denotes test methods that	are of	utside of the ISO 17	025 sco	pe of accre	ditation.		
	Statements of conformity to s	pecific	ations are based on				n rule (JCGM 106.	2012)
. 1	d. FIDLILINA INVLICE A DI 06101000 (Conserved de 05/00/000	4 4 0 0 4					A · · · · · · · · · · · · · · · · · · ·	

May10/24

Report Id: FIRHUM [WUSCAR] 06181323 (Generated: 05/20/2024 10:04:05) Rev: 1

Contact/Location: Service Manager - FIRHUM

21µ

38µ

FIRST MANUFACTURING 1007 W 2ND AVE HUMBOLDT, SD US 57035

Contact: Service Manager

no image

no image

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